REMARKS

Claims 1-66 were pending in the application. Claims 1-60 and 62-66 have been cancelled without prejudice to presentation in future related applications. Claim 61 has been amended. New claims 67-84 have been added.

Claim 61 has been amended to further clarify the claimed invention. Support for the amendments to claim 61 and for new claims 67-84 can be found throughout the application as originally filed, including, for example, in the as-filed claims, paragraphs [0012], [0013], [0027], [0031], [0065], [0079], [0176], [0177], [0193], [0260], [0290] and Table 113.

The specification was amended to correct a typographical error in the "CROSS-REFERENCE TO RELATED APPLICATIONS". Support for this amendment can be found, *inter alia*, in the Declaration filed August 3, 2004.

No new matter has been added.

Upon entry of this amendment, claims 61 and 67-84 will be pending.

Markush Groups

The Office alleges that "the claims recite improper Markush Groups", noting that "the methods and products rely upon polynucleotides, polypeptides and antibodies which differ in both structure and modes of action to such an extent and require non-coextensive searches to such an extent that they are considered to lack a substantial structural feature disclosed as being essential to the disclosed utility." Although Applicants respectfully disagree, Applicants note that the objection is rendered moot by the Restriction Requirement presently outstanding and by the claim amendments set forth herein.

Summary of Human Sequences

For the Examiner's convenience, Applicants set forth below a listing of the human sequences described in the sequence listing and Tables 1-124 of the application as filed:

Human genomic sequences

SEQ ID NOS: 4, 10, 16, 26, 32, 46, 60, 70, 80, 96, 114, 137, 153, 173, 187, 209, 223, 229, 235, 243, 255, 261, 267, 281, 293, 303, 311, 321, 341, 359, 367, 375, 383, 397, 407, 413, 427, 449, 455, 463, 473, 481, 491, 499, 507, 515, 521, 527, 541, 547, 555, 563, 643, 651, 659, 669, 681, 715, 723, 743, 749, 759, 775, 787, 793, 805, 811, 817, 823, 833, 839, 851, 861, 871, 879, 899, 909, 917, 930, 938, 950, 966, 976, 990, 1002, 1016, 1024, 1040, 1046, 1054, 1068, 1082, 1088, 1102, 1112, 1122, 1130, 1140, 1151, 1165, 1175, 1185, 1193, 1205, 1211, 1235, 1241, 1255, 1267, 1277, 1295, 1301, 1313, 1349, 1357, 1369, 1377, 1383, 1391, 1403, 1411, 1419, 1425, 1431 and 1439

Human mRNA sequences

SEQ ID NOS: 5, 11, 17, 19, 21, 27, 33, 47, 49, 51, 53, 55, 61, 63, 65, 71, 81, 83, 85, 87, 89, 97, 99, 101, 103, 105, 107, 109, 115, 117, 119, 121, 123, 125, 127, 129, 138, 140, 142, 144, 146, 148, 154, 156, 158, 160, 162, 164, 166, 168, 174, 176, 178, 180, 188, 190, 192, 194, 196, 198, 200, 202, 204, 210, 212, 214, 216, 218, 224, 230, 236, 238, 244, 246, 248, 250, 256, 262, 268, 270, 272, 274, 276, 282, 284, 286, 288, 294, 296, 298, 304, 306, 312, 314, 316, 322, 324, 326, 328, 330, 332, 342, 344, 346, 348, 350, 352, 354, 360, 368, 370, 376, 384, 386, 388, 390, 392, 398, 400, 402, 408, 414, 416, 418, 420, 428, 430, 432, 434, 436, 438, 440, 442, 444, 450, 456, 458, 464, 466, 468, 474, 476, 482, 484, 486, 492, 494, 500, 508, 510, 516, 522, 528, 530, 532, 534, 536, 542, 548, 550, 556, 558, 564, 566, 568, 570, 572, 574, 576, 578, 580, 582, 584, 586, 588, 590, 592, 594, 596, 598, 600, 602, 604, 606, 608, 610, 612, 614, 616, 618, 620, 622, 624, 626, 628, 630, 632, 634, 644, 646, 652, 654, 660, 662, 664, 670, 672, 674, 676, 682, 684, 686, 688, 690, 692, 694, 696, 698, 700, 702, 704, 706, 708, 710, 716, 718, 724, 726, 728, 730, 732, 734, 736, 744, 750, 752, 754, 760, 776, 778, 780, 782, 788, 794, 796, 798, 800, 806, 812, 818,

824, 826, 828, 834, 840, 842, 844, 846, 852, 854, 856, 862, 864, 866, 872, 874, 880, 882, 884, 886, 888, 890, 892; 894, 900, 902, 910, 912, 918, 920, 922, 931, 933, 939, 941, 943, 945, 951, 953, 955, 957, 959, 961, 967, 969, 977, 979, 981, 983, 985, 991, 993, 995, 997, 1003, 1005, 1017, 1025, 1027, 1029, 1031, 1033, 1035, 1041, 1047, 1049, 1055, 1057, 1059, 1061, 1063, 1069, 1071, 1073, 1075, 1077, 1083, 1089, 1091, 1093, 1103, 1105, 1113, 1115, 1117, 1123, 1125, 1131, 1133, 1135, 1141, 1143, 1145, 1147, 1149, 1152, 1154, 1156, 1158, 1160, 1166, 1168, 1170, 1176, 1178, 1180, 1186, 1188, 1194, 1196, 1198, 1200, 1206, 1212, 1214, 1216, 1218, 1220, 1222, 1224, 1226, 1228, 1230, 1236, 1242, 1244, 1246, 1248, 1250, 1256, 1258, 1260, 1262, 1268, 1270, 1272, 1278, 1280, 1282, 1284, 1286, 1288, 1290, 1296, 1302, 1304, 1306, 1308, 1314, 1316, 1318, 1322, 1324, 1326, 1320, 1328, 1330, 1332, 1334, 1336, 1338, 1340, 1342, 1350, 1352, 1358, 1360, 1362, 1364, 1370, 1372, 1378, 1384, 1386, 1392, 1394, 1396, 1398, 1404, 1406, 1412, 1414, 1420, 1426, 1432, 1434 and 1440

Human protein sequences

SEQ ID NOS: 6, 12, 18, 20, 22, 28, 34, 48, 50, 52, 54, 56, 62, 64, 66, 72, 82, 84, 86, 88, 90, 98, 100, 102, 104, 106, 108, 110, 116, 118, 120, 122, 124, 126, 128, 130, 139, 141, 143; 145, 147, 149, 155, 157, 159, 161, 163, 165, 167, 169, 175, 177, 179, 181, 189, 191, 193, 195, 197, 199, 201, 203, 205, 211, 213, 215, 217, 219, 225, 231, 237, 239, 245, 247, 249, 251, 257, 263, 269, 271, 273, 275, 277, 283, 285, 287, 289, 295, 297, 299, 305, 307, 313, 315, 317, 323, 325, 327, 329, 331, 333, 343, 345, 347, 349, 351, 353, 355, 361, 369, 371, 377, 385, 387, 389,391, 393, 399, 401, 403, 409, 415, 417, 419, 421, 429, 431, 433, 435, 437, 439, 441, 443, 445, 451, 457, 459, 465, 467, 469, 475, 477, 483, 485, 487, 493, 495, 501, 509, 511, 517, 523, 529, 531, 533, 535, 537, 543, 549, 551, 557, 559, 565, 567, 569, 571, 573, 575, 577, 579, 581, 583, 585, 587, 589, 591, 593, 595, 597, 599, 601, 603, 605, 607, 609, 611, 613, 615, 617, 619, 621, 623, 625, 627, 629, 631, 633, 635, 645, 647, 653, 655, 661, 663, 665, 671, 673, 675, 677, 683, 685, 687, 689, 691, 693, 695, 697, 699, 701, 703, 705, 707, 709, 711, 717, 719, 725, 727, 729, 731, 733, 735, 737, 745, 751, 753, 755, 761, 777, 779, 781, 783, 789, 795, 797, 799, 801, 807, 813, 819, 825, 827, 829, 835, 841, 843, 845, 847, 853, 855, 857, 863, 865, 867, 873, 875, 881, 883, 885, 887, 889, 891, 893, 895, 901, 903, 911, 913, 919, 921, 923, 932, 934, 940, 942, 944, 946, 952,

954, 956, 958, 960, 962, 968, 970, 978, 980, 982, 984, 986, 992, 994, 996, 998, 1004, 1006, 1018, 1026, 1028, 1030, 1032, 1034, 1036, 1042, 1048, 1050, 1056, 1058, 1060, 1062, 1064, 1070, 1072, 1074, 1076, 1078, 1084, 1090, 1092, 1094, 1104, 1106, 1114, 1116, 1118, 1124, 1126, 1132, 1134, 1136, 1142, 1144, 1146, 1148, 1150, 1153, 1155, 1157, 1159, 1161, 1167, 1169, 1171, 1177, 1179, 1181, 1187, 1189, 1195, 1197, 1199, 1201, 1207, 1213, 1215, 1217, 1219, 1221, 1223, 1225, 1227, 1229, 1231, 1237, 1243, 1245, 1247, 1249, 1251, 1257, 1259, 1261, 1263, 1269, 1271, 1273, 1279, 1281, 1283, 1285, 1287, 1289, 1291, 1297, 1303, 1305, 1307, 1309, 1315, 1317, 1319, 1321, 1323, 1325, 1327, 1329, 1331, 1333, 1335, 1337, 1339, 1341, 1343, 1351, 1353, 1359, 1361, 1363, 1365, 1371, 1373, 1379, 1385, 1387, 1393, 1395, 1397, 1399, 1405, 1407, 1413, 1415, 1421, 1427, 1433, 1435 and 1441

Restriction Requirement

Claims 1-66 are subject to a restriction requirement. The Examiner required Applicants to elect one of seventeen allegedly patentably distinct inventions for examination. The Office also required the election of "one sequence, SEQ ID number" in the event that any of Groups I-XVII are elected. Applicants respectfully traverse on the grounds that searching more than one of the groups set forth by the Office would pose no serious burden on the Examiner.

MPEP §803 sets forth criteria for determining when restriction is proper, stating, *inter alia*, that "[i]f the search and examination of all the claims in an application can be made without serious burden, the examiner must examine them on the merits, even though they include claims to independent or distinct inventions." Applicant respectfully asserts that searching more than group, in particular, Groups XVI and XII, would not constitute a serious burden. Applicants note that both of Groups XVI and XII include measuring expression of a CA gene. Accordingly, search results for Group XVI would be highly relevant to Group XII and *vice versa*.

Although Applicants respectfully traverse the restriction requirement on the grounds that examining more than one invention would not constitute a serious burden, Applicants provisionally elect herein "Group XVI, Claim 61, drawn to a method for diagnosing cancer comprising determining the expression of a nucleic acid sequence, respectively, classified in class 424, subclass 9.1". Claims 61 and 67-81 read on Group XVI. Applicants elect for

examination the CR1 (Complement Receptor type 1) sequences set forth in Table 113. Applicants further elect SEQ ID NO:1320 (human mRNA sequence).

Notwithstanding, Applicants respectfully request that Group XII be examined along with Group XVI. Applicants note that as filed claims 50-53 have been cancelled without prejudice and replaced with new claims 82-84 which read on Group XII.

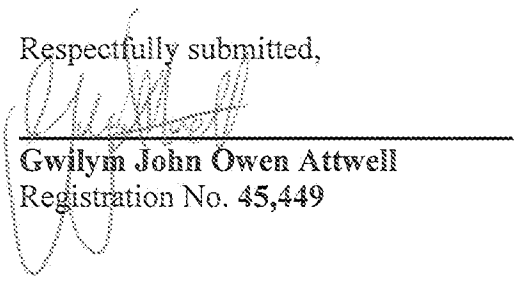
Applicants reserve the right to prosecute the claims encompassed by any of the non-elected groups in future divisional applications.

Conclusion

The examination of the pending claims and passage to allowance are respectfully requested. An early Notice of Allowance is therefore earnestly solicited. Applicant invites the Examiner to contact the undersigned at (302) 778-8458 to clarify any unresolved issues raised by this response.

Applicants request that any charges or credits be applied to Deposit Account No. 06-1050.

Respectfully submitted,



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